RESEARCH AND DEVELOPMENT, NEUCHATEL - QUARTERLY REPORT

DIVISION : RESEARCH

SUBJECT TITLE : ARCHIVE

PERIOD COVERED : JULY - DECEMBER 1988

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KEYWORDS : oriental, tobacco, process, treatment, organoleptic, subjective, cigarette

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OBJECTIVE
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To reduce the amount of Oriental tobacco in a typical American blend without changing organoleptic and smoke delivery parameters.

RESULTS
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Currently, Oriental tobacco is humidified together with other tobaccos using steam and reduced pressure. This process is assumed to remove a large amount of Oriental taste components. A milder treatment should retain more Oriental character and reduce the amount of Oriental needed in the blend.

Four blends were produced in the mini primary without using the vacuum chamber treated Oriental tobacco. The Oriental tobacco was steam treated and left to stabilize for 12 hours. The maximum temperature reached by the tobacco was 30°C. The blends contained 100%, 75%, 50% and 25% of the Oriental tobacco used in the MLF reference blend. The reference MLF blend was produced with the same batches of tobacco used in the trials. To maintain the same percentage of other tobaccos in each blend, Oriental was replaced by corresponding amounts of a neutral tobacco. The normal amount of flavors was applied to all prototypes.

The cigarettes produced with the 4 blends were compared with the reference by a difference panel smoking blind. The cigarettes were also analysed for smoke delivery figures by the smoking laboratory. The panel could not detect any difference between the test cigarettes and the reference at any level of Oriental tobacco.

Smoking by an expert panel was inconclusive and the preparation of 100% Orient prototypes was requested.

PLANS
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To investigate the effect of low temperature treatment. Prototypes will be prepared with reduced amounts of Oriental tobacco and with 100% Oriental tobacco treated at different temperatures.